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INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
CENTRE DE RECHERCHES POUR LE DÉVELOPPEMENT INTERNATIONAL

SCALING UP FOOD SECURITY INNOVATIONS IN ASIA

Phnom Penh, Cambodia

March 29 – 31, 2016

Canada

Getting to know each other

Rules of engagement

The rules that will govern our time together, our interactions and behaviour

Program

- What do we know about scaling up
- Your scaling up strategies
  - Solutions
  - business models
  - Partnerships
- Impact assessment
- Innovations portfolio
- Your research plan

Objectives

Build a common understanding of what scaling up innovations means and relate this knowledge to practical applications to improve scaling up strategies

Objectives

Apply scaling up analytical tools to better develop and implement scaling up strategies and research plans

Objectives

Refine scaling up strategies and research plans and walk away from the workshop with well rounded capabilities to effectively implement them

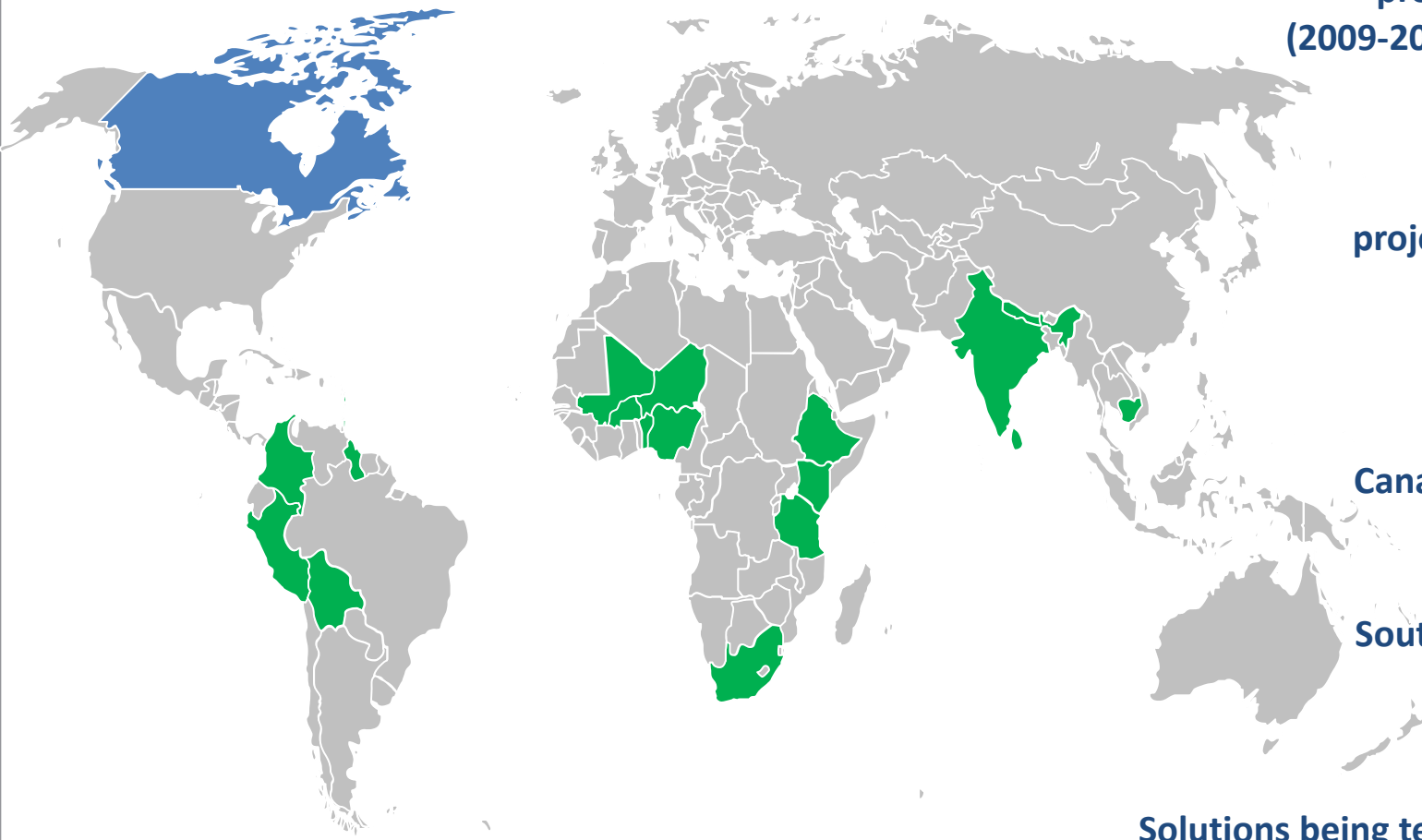
Objectives

Learn from the experience of peers and exchange valuable knowledge, recommendations and resources on scaling up innovations

The CIFSRF (+)

CIFSRF in numbers (Phases 1 and 2)

CIFSRF: Research that feeds the world



124

million $CAD committed for the program's two phases (2009-2014 and 2013-2018)

39

projects in 20 countries around the world

20

Canadian organizations

40

Southern organizations

+60

Solutions being tested and scaled up

Affaires mondiales Canada
Global Affairs Canada

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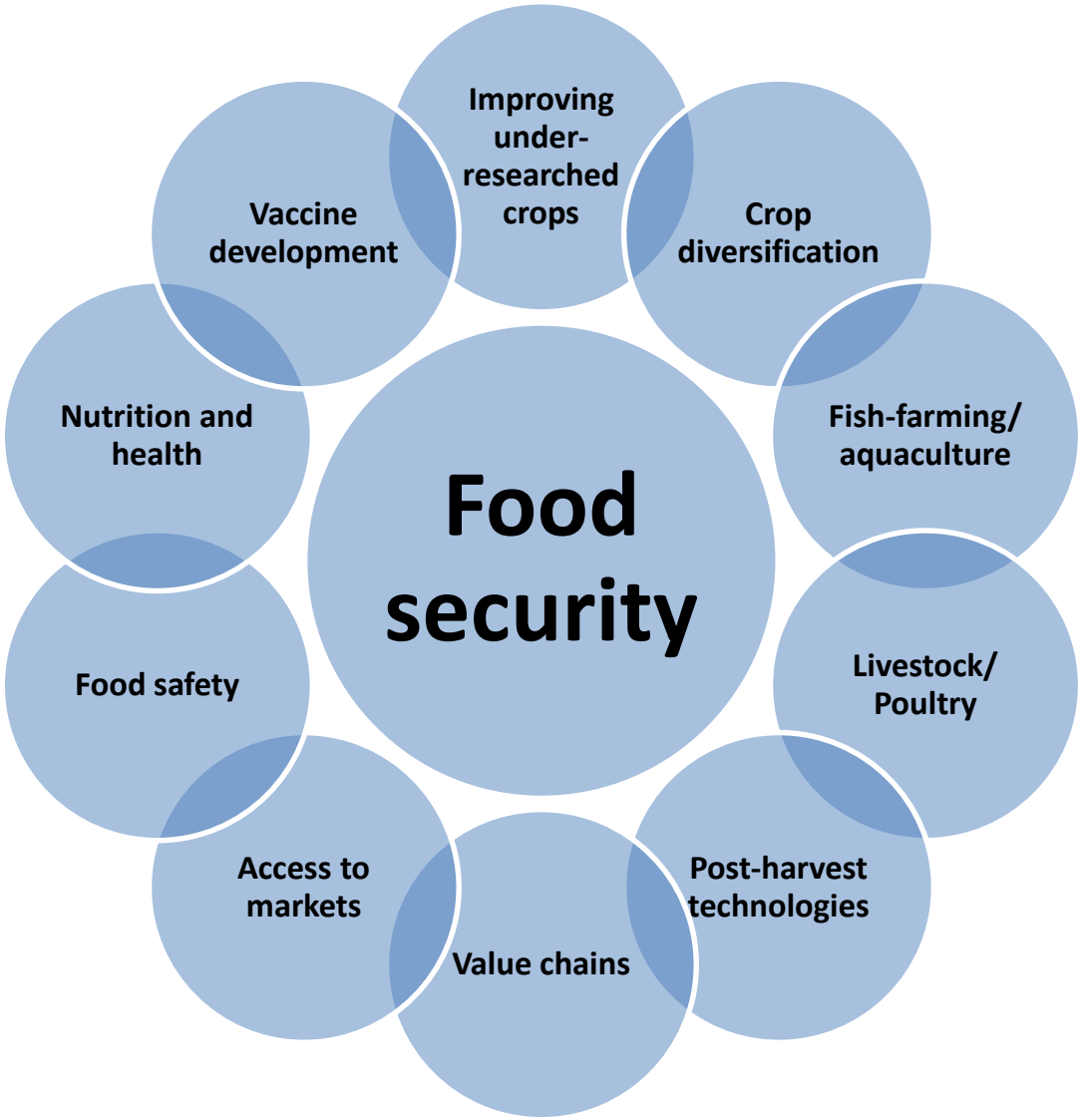
Canada

A diversity of research topics



Key highlights of Phase 1

SUSTAINABLE AGRICULTURE HIGHLIGHTS

100% of CIFSRF Phase 1 projects aimed to improve productivity.
69% of technologies tested aimed to improve farming systems, practices and production.
59% of technologies tested aimed to improve environmental sustainability.

NUTRITION HIGHLIGHTS

Nutrition-related technologies or practices tested included:

80 related to dietary diversity and balanced diets.
54 related to more equitable food distribution.
60 related to improved food processing and storage.
92 aimed to improve women and children's access to adequate and diversified diets.

GENDER HIGHLIGHTS

39% of Phase 1 researchers were women

Of **144** technologies tested across all projects:

92 improved women and children's diets
70 improved women's access to and control over income
45 are reducing women's drudgery or workload

A total of **151,379** women farmers have adopted innovations tested in CIFSRF research.

MARKETS HIGHLIGHTS

Among the innovations tested:

54 aimed to improve food distribution
60 aimed to improve food processing and storage
89 aimed to improve income security
72 aimed to improve access to markets
31 aimed to improve access to and use of ICTs

POLICY HIGHLIGHTS

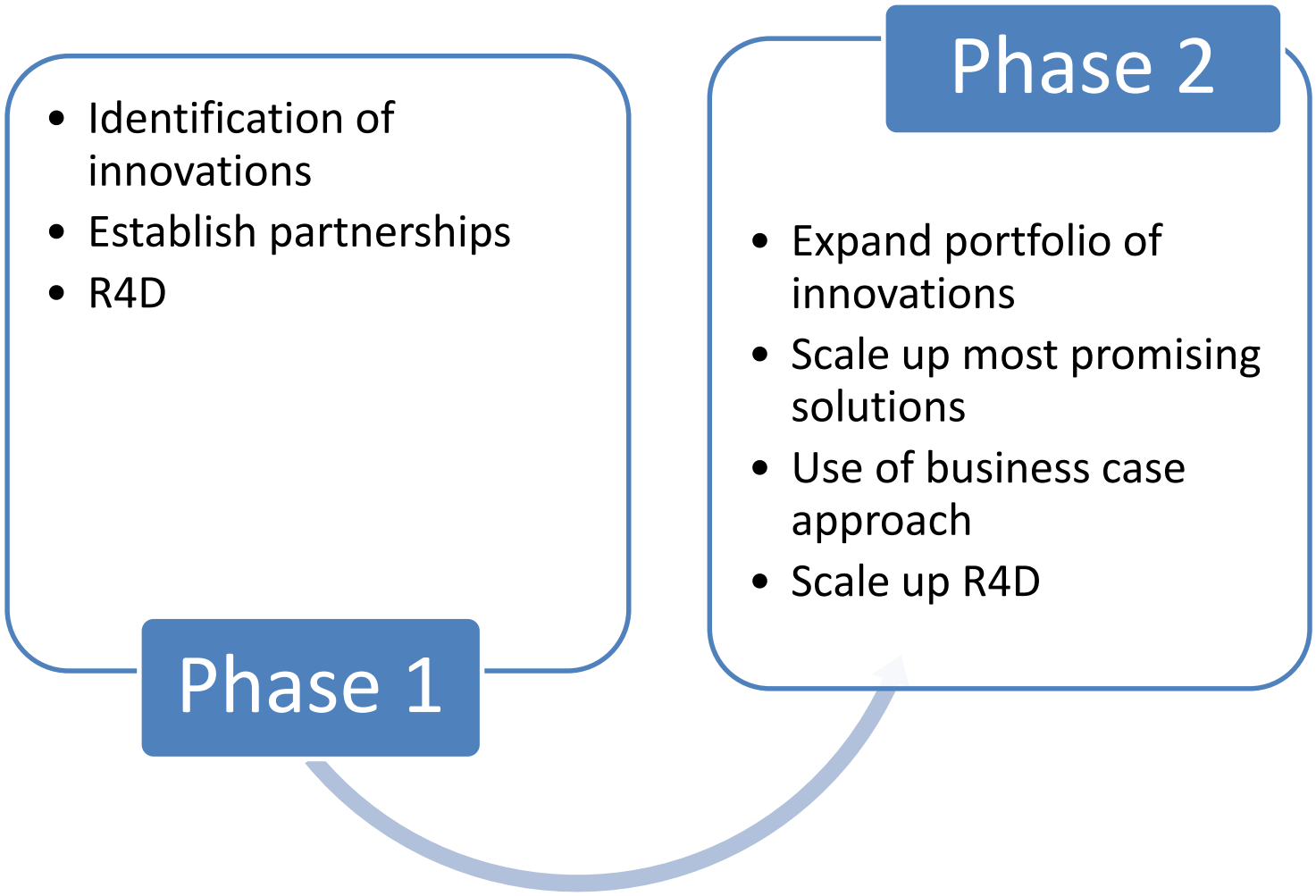
CIFSRF has influenced:

Over CAD$137.5 million in new IDRC programs

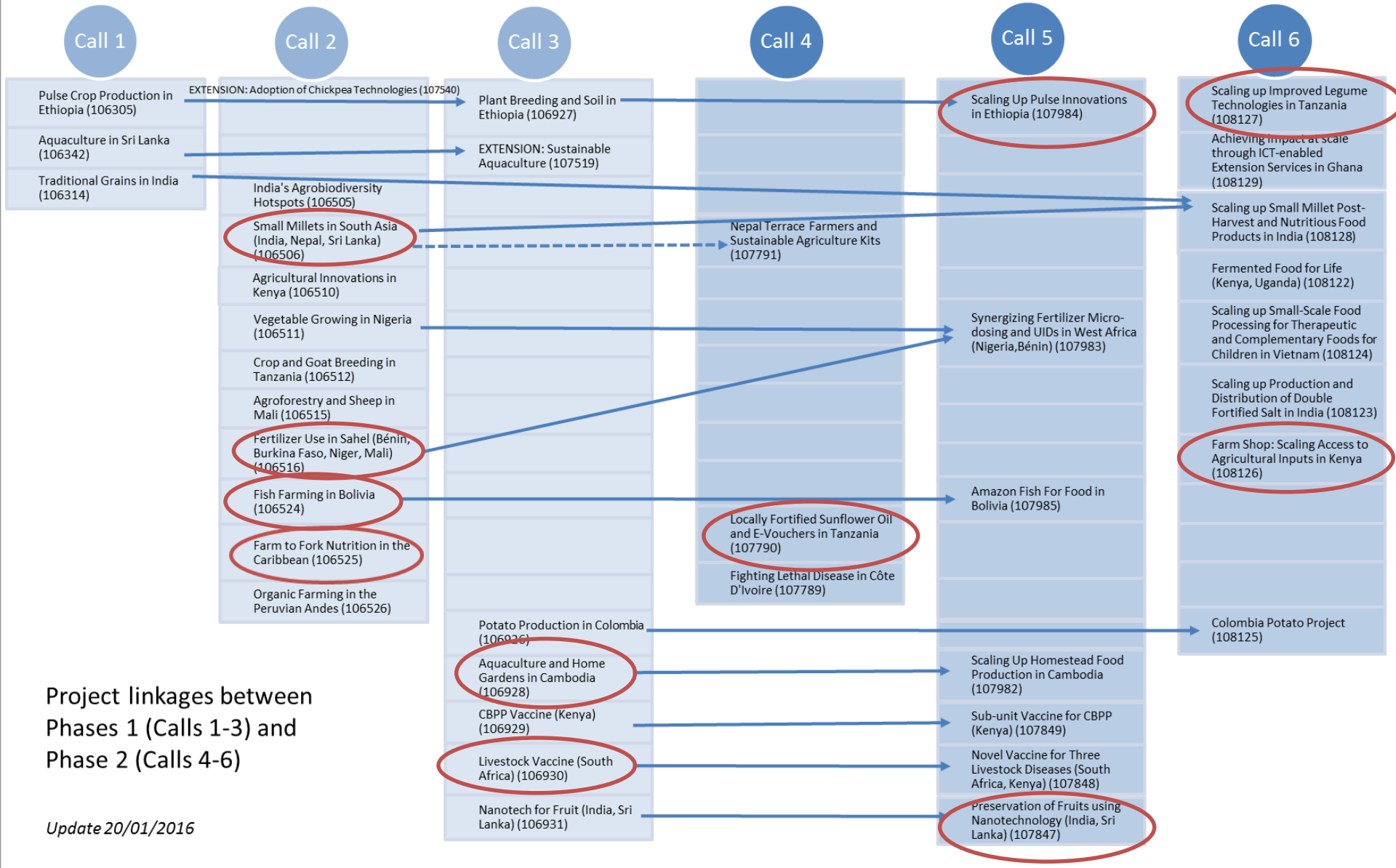
5 new food security programs at IDRC

3 national policies in developing countries

Transition from Phase 1 to Phase 2



CIFSRF Portfolio of projects



Project linkages between Phases 1 (Calls 1-3) and Phase 2 (Calls 4-6)

Update 20/01/2016

Scaling up Concepts

Scaling up concepts

What do we know about scaling up?

What is scaling up?

What is NOT scaling up?

What does it look like (when achieved)?

How can it be attained?

Scaling up concepts

Innovation: A change in the way things are done

- Use or adoption of a new technology
- Change in day-to-day practices
- Revamping of an entire production process
- A new crop in the production basket/portfolio
- Access to new markets
- New organizations
- Value chains
- New institutions and policies

Innovations do not need to be ‘new’ or ‘different’, but rather novel and relevant in a particular context

Scaling up concepts

Impacts at scale: Cumulative benefits resulting from the widespread adoption, use and ultimate effects of an innovation.

Scaling up (process): increasing the reach, depth, breadth, scope and sustainability of impact that innovations transformed into actionable solutions bring to end users.

Scaling up concepts

Innovation categories:

Intangible
Weak causal link

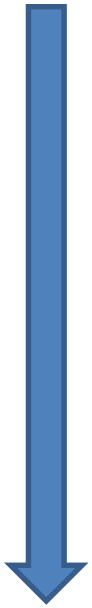
Concepts

Policies

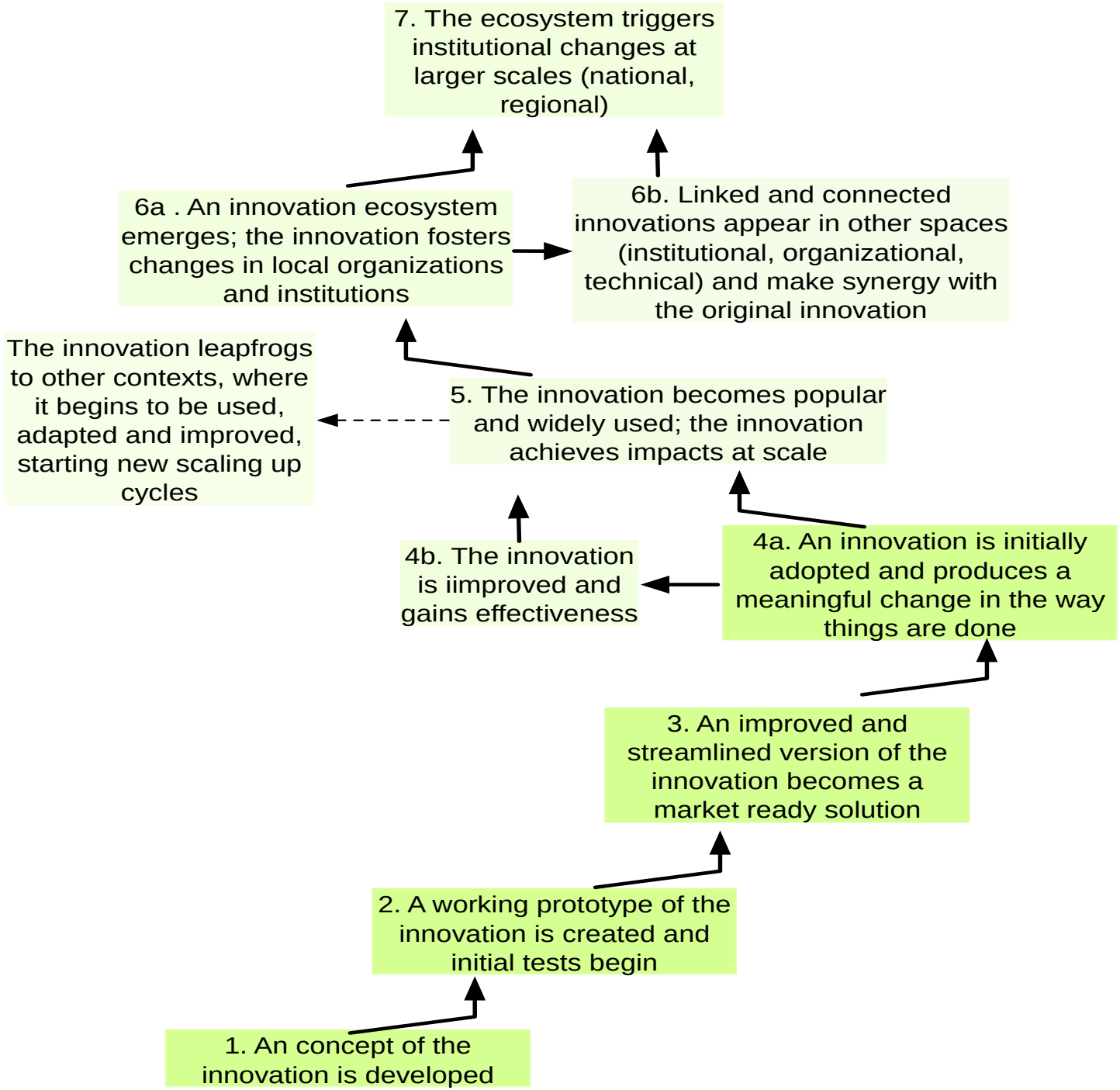
Models

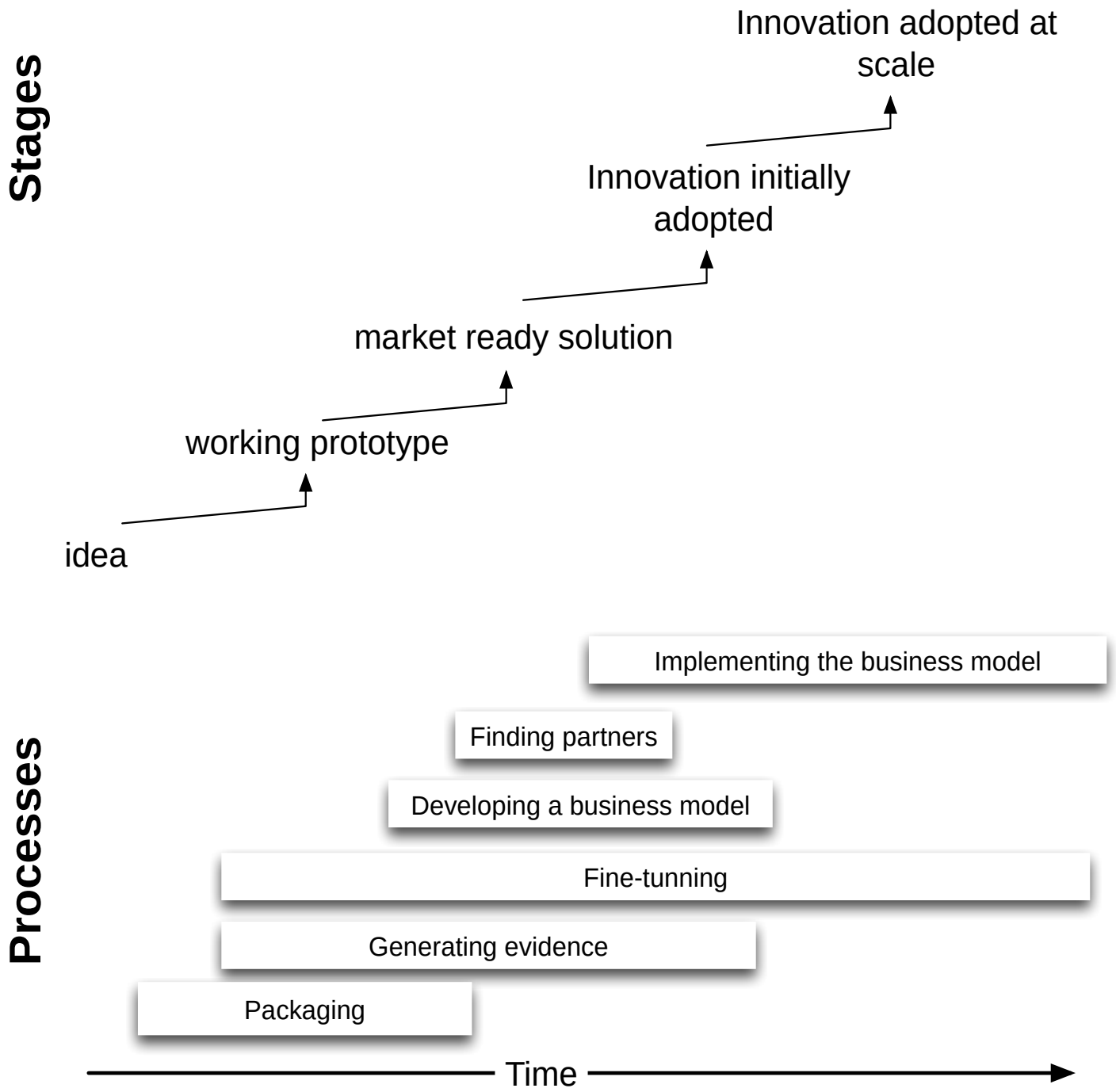
Services

Products

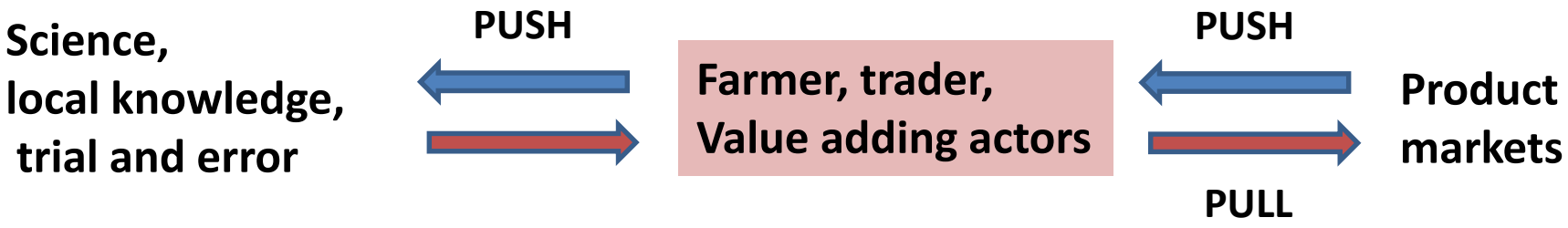


Tangible
Strong causal link


7. The ecosystem triggers institutional changes at larger scales (national, regional)
6a . An innovation ecosystem emerges; the innovation fosters changes in local organizations and institutions
6b. Linked and connected innovations appear in other spaces (institutional, organizational, technical) and make synergy with the original innovation
The innovation leapfrogs to other contexts, where it begins to be used, adapted and improved, starting new scaling up cycles
5. The innovation becomes popular and widely used; the innovation achieves impacts at scale
4b. The innovation is iimproved and gains effectiveness
4a. An innovation is initially adopted and produces a meaningful change in the way things are done
3. An improved and streamlined version of the innovation becomes a market ready solution
2. A working prototype of the innovation is created and initial tests begin
1. An concept of the innovation is developed


Stages
Innovation adopted at scale
Innovation initially adopted
market ready solution
working prototype
idea
Processes
Implementing the business model
Finding partners
Developing a business model
Fine-tunning
Generating evidence
Packaging
Time

Products, services



Models, policies, concepts

What factors influence (enhance or hinder) the scaling up of innovations?

- Innovations' characteristics (relative advantage)
- Individual choices
- The day-to-day repertoire of practices
- Business model
- Partners
- Socio-technical regimes (local, sectorial)
- Organizations and institutions
- Chance and opportunity
- Other context factors

In practice, the scaling up of an innovation is the result of a very complex set of factors

The five challenges of scaling up

1. **Getting your hands on a good solution**
2. **Finding the right business model**
3. **Finding the right partners**
4. **Timing and scanning opportunities**
5. **Leadership for the long run**

These 5 challenges constitute the key elements of a scaling up strategy

Is your strategy able to undertake these five challenges?

Your scaling up strategies: Good innovation

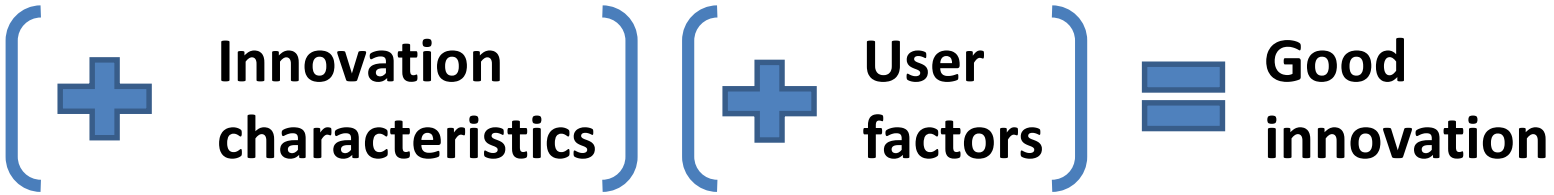
Good innovation

Innovation characteristics:

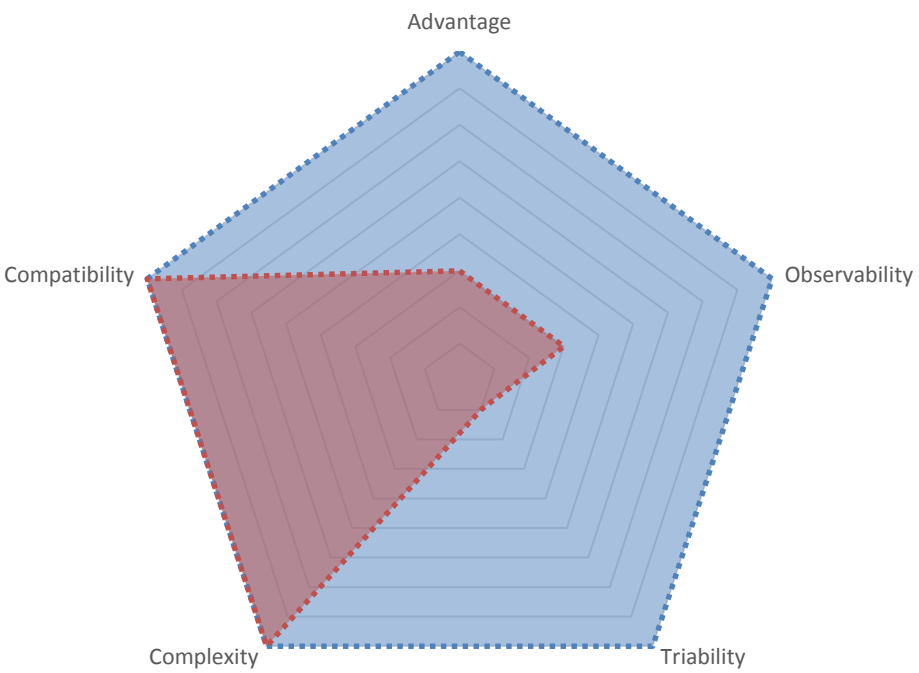
- Advantage
- *Affordability*
- Observability
- Triability
- Complexity
- Compatibility

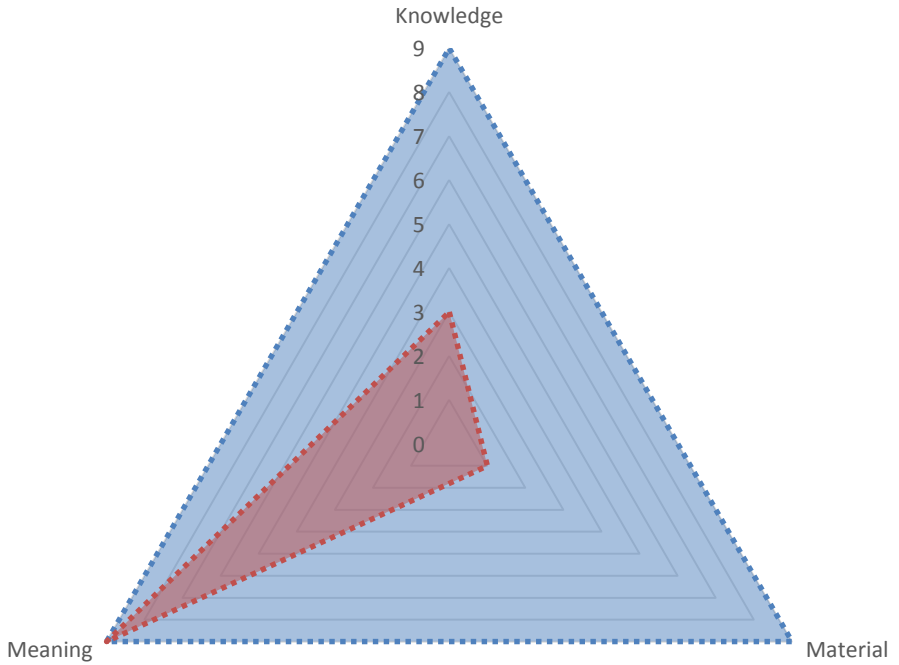
User (decision) factors:

- Obtainable knowledge
- Available material means
- Meaning in the context of the user



Good innovation





(+ 25/45) (+ 13/27) = 0.264

Good innovation

Exercise 1

Discuss over one of the innovations your project is scaling up with your group:

1. Does it have the characteristics needed to scale up? What is missing? What needs be improved?
   - Score the innovation against the 6 innovation characteristics

2. Are all the user decision factors in place? What is missing? What needs to be improved?
   - Score the innovation against the three user factors

3. Prepare to share

Your scaling up strategies: Good business model

Right business model

Business models:

	Product & service	Models	Policy	Concept
Commercialization business model	≡			
Knowledge transfer business model		≡		≡
Policy incidence business models			≡	

			Product & Service	Model	Policy	Concept
Commercialization models	Commercialization	Production and distribution of the innovation is managed internally by the organization	xxx			
	Merge and acquisition	The organization acquires or merges with another company to produce and/or distribute the innovation	xxx			
	Risk ventures	The organization invests in a spinoff venture that will handle the productions and/or the distribution of the innovation	xxx			
	Franchising	The organization sells or gives away restricted rights to produce and/or distribute the innovation to a third party and provides strict quality and process guidelines	xxx			
	Licencing	The organization sells or gives away the rights to produce and commercialize an innovation to a third party	xxx			
	Strategic partnerships	The organization agrees to jointly work with another organization in producing and/or commercializing the innovation	xx			
	Incubators	The organization creates a special unit to nurture and develop the innovation. This includes commercializing it in 'protected' niches and producing it under non-commercial conditions	xx	x		

			Product & Service	Model	Policy	Concept
Knowledge transfer models	Accelerator	A business accelerator includes mentorship and training and peer support to take an idea or innovation into a stage in which it has commercial potential	xx	x		
	Innovation platforms	The innovation is transferred by the organization to a platform of likeminded organizations and key stakeholders who are interested in promoting the delivery of the innovation to the end user	x	xxx	x	x
	Extension	The innovation is transferred by the organization (using extension and knowledge dissemination tools, such as farmer field schools) directly to the end user for its adoption	x	xxx		xx
Policy incidence models	Informing policy	An evidence-based innovation (a policy innovation) is communicated to key policymakers for its incorporation into the existing institutional framework.	x	x	xxx	xxx
	Lobbying	The organization attempts to influence the decisions of policymakers by actively engaging them and using evidence to convince them to adopt a policy innovation	x	x	xxx	x
	Advocacy	The organization actively campaigns and uses political forces to influence decision makers in the adoption of a policy innovation		x	xx	xxx

Good innovation

Delivery costs:

- Production/development
- Distribution/dissemination
- Marketing/outreach
-Other

Sustainability:

- User investment
- User costs
- Tangible benefits for users

Is the business model sustainable ?

Delivery costs (5y) + **User costs (5y)** + **User investment** < **Tangible benefits (5y)**

Good innovation

Sustainability

3000 x 5 / 10000

0.1 x 5

0.85 x 5

1.5  **0.5**  **2**  **4.25**

Right business models

Exercise 2

Discuss over one of the innovations your project is scaling up with your group:

1. What business model did you select/developed to scale up your innovation? Why?

2. Is your business model sustainable? What are the costs and benefits?

3. Prepare to share

Scaling up strategy

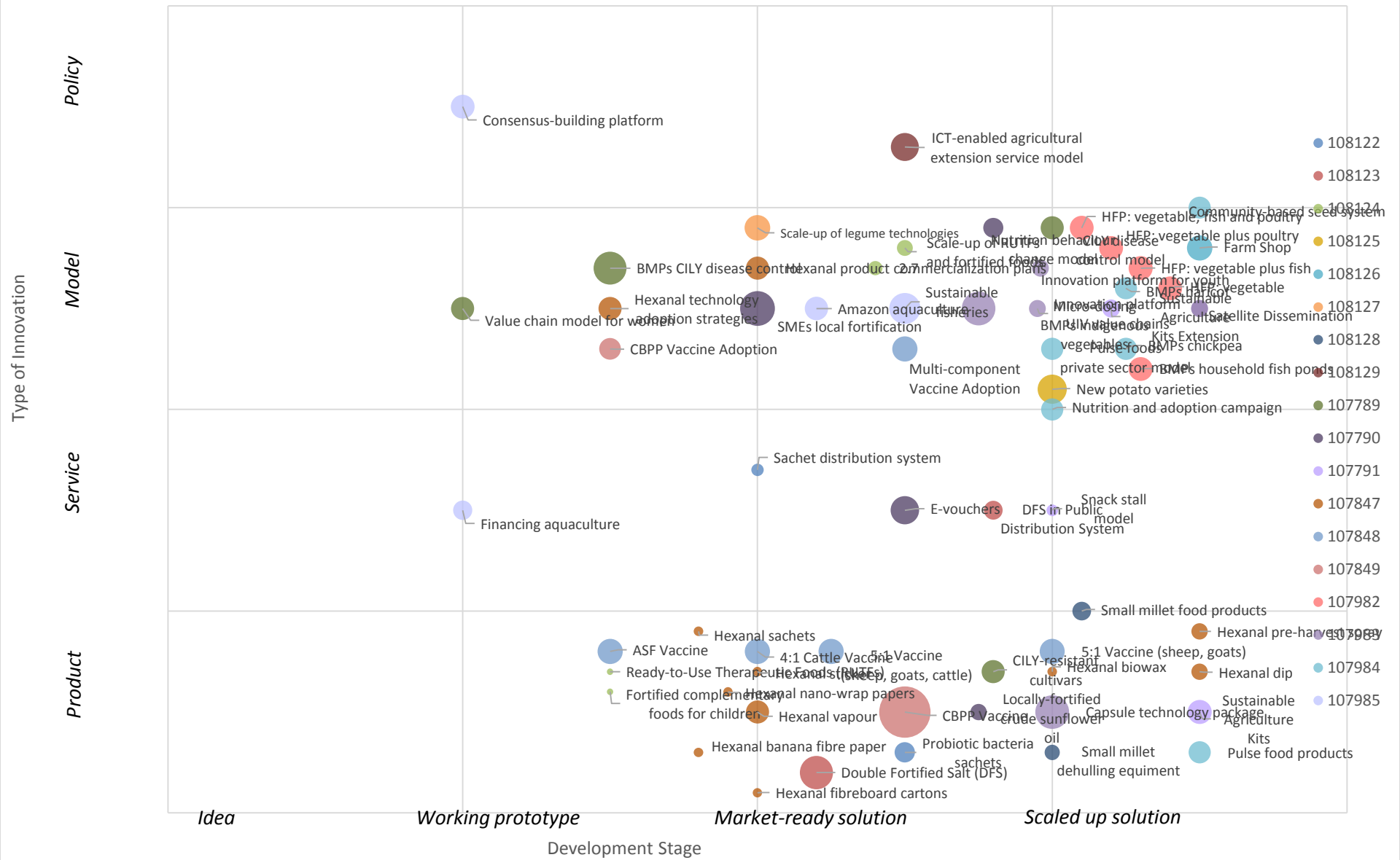
1. Portfolio of innovations – scaling up focus, direction and objectives

1. Gap analysis – 5 challenges

1. Impact projections – targets

2. Scaling plan – how to close the gaps and achieve objectives

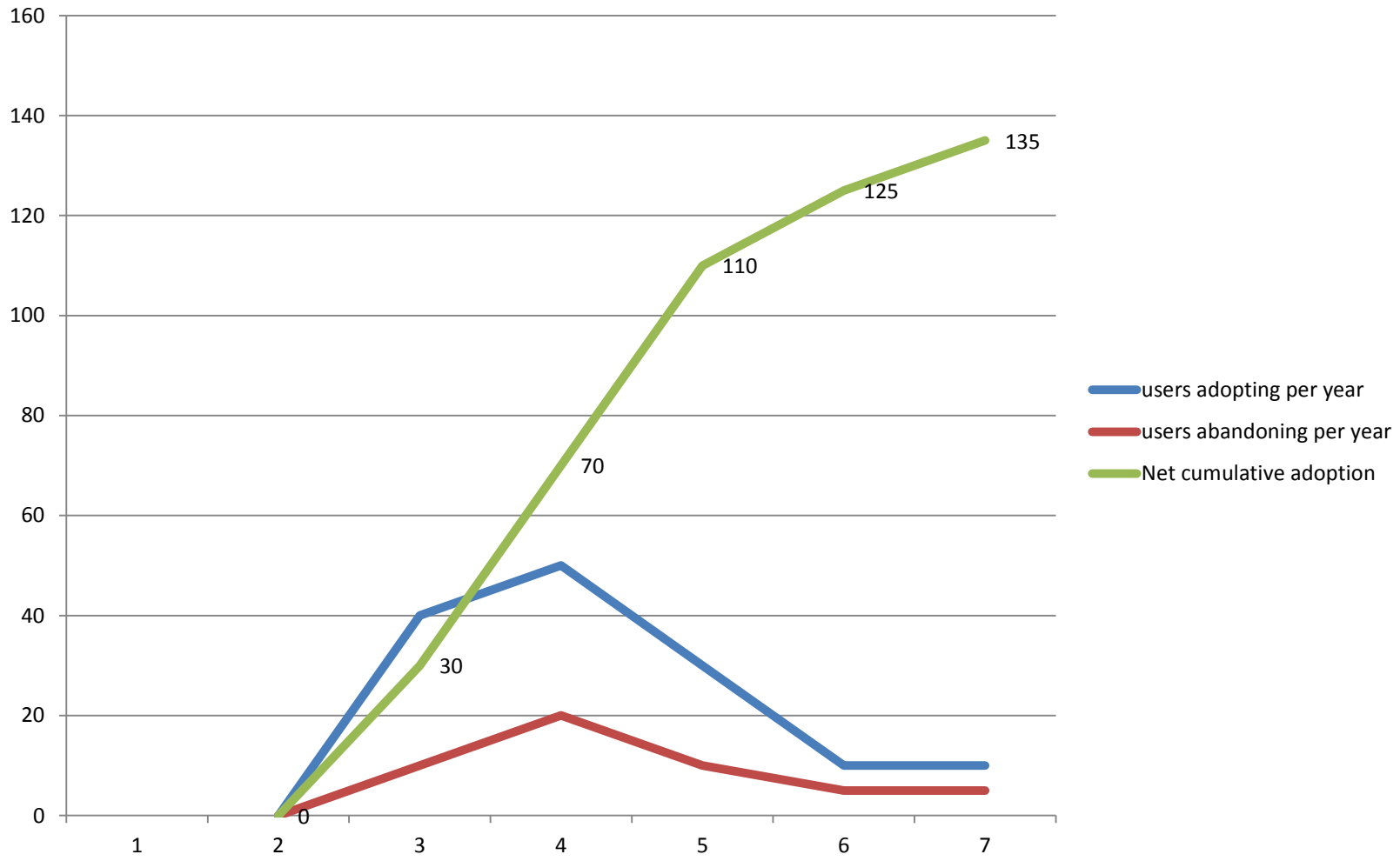
CIFSRF Phase 2 Innovations



Impact projections

Impact projections will provide specific targets for your scaling up strategy

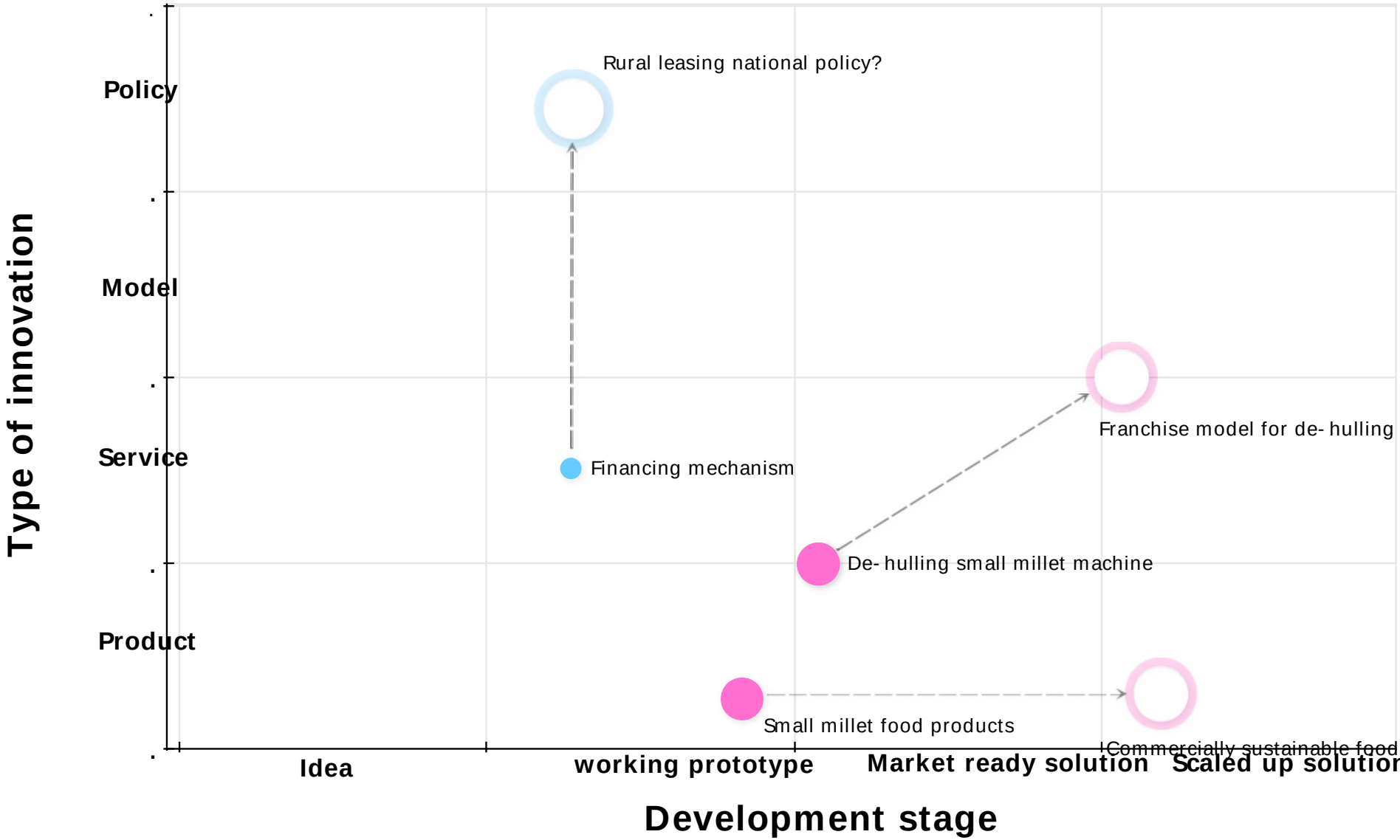
Impact projections



Your portfolio

The position of your innovations in the scaling up process is the point of departure of your scaling up strategy

Your portfolio



Gap analysis -Good solution

External

- Is your innovation taking advantage of key innovation push / pull drivers?
- Are the adoption drivers in place to enable scaling up?

Internal

- Does your innovation have strong science behind it?
- Is it robust enough to work under varying conditions?
- Does it deliver clear benefits?

What are the key issues you need to tackle to enhance your solution?

Gap analysis – Right business model

Private sector for-profit model

- Market oriented innovations: the “profit motive” powers the entire model
- Production and delivery in the hands of private actors (business, entrepreneurs, etc.)
- Privately owned resources and privately appropriated benefits
- Scale is an indirect consequence of business success

Gap analysis – Right business model

Public sector entrepreneurial model

- Market oriented innovations: users needs and demands are the main driver but the production of public goods is also a key driver
- Production and delivery in hands of public, para-public, decentralized organizations, NGOs and social enterprises, sometimes in partnership with the private sector
- Public and private capital (sometimes project and donors resources also involved)
- Deliver of public benefits at scale is a direct desired consequence and private profits to fuel the business are also actively perused

Gap analysis – Right business model

Public sector / private sector knowledge dissemination model

- Driven mainly by public interests (i.e. the dissemination of knowledge)
- Production and delivery by public or private sector organizations (notably NGOs)
- Mostly funded by public monies including projects funded by international donors
- Public good (dissemination knowledge, stakeholder participation, etc.) is the main desired consequence whilst private profits are usually an indirect consequence

Gap analysis – Right business model

Public sector / private sector knowledge dissemination model

- Not necessarily driven by the market but by public interests (i.e. the dissemination of knowledge)
- Production and delivery in public or private sector hands
- Mostly funded by public monies including projects and donors
- Public good is the main desired consequence whilst private profits are usually an indirect consequence

Gap analysis – Right business model

Policy incidence model

- Public interest and political markets come into play and power this model
- Informing policy, incidence and advocacy are the key processes that convey an innovative policy alternative towards policymakers –the main “users” of these alternatives.
- Success is highly dependant on timing and opportunity
- Public good is the main outcome

Gap analysis - Right business model

Is the type of business model you are using appropriate for the type of innovation you want to scale up?

How well do you know the end-user, their needs and challenges?

Do you have the capabilities and resources to deliver the innovation, through this business model, to the end users?

What are the key issues you need to tackle to improve your business model?

Gap analysis - Right partner

Do you need a partner? Why (refer to last question)

Do you need a public sector or private sector partner? Why?

What are the challenges you will face in finding and working with these partners?

What are the key issues you need to address to improve your partnership?

Gap analysis - Timing and opportunity

What opportunities for scaling up (besides users´ demand) are you taking advantage of?

Is this the right time to scale up this innovation?

Is your innovation, your business model and your partnership “mature” for scaling up?

What are the main(context) barriers you need to overcome to scale up your innovation?

Gap analysis - Leadership

Who is championing the scaling up process?

Do you have personal and/or institutional commitments invested in this process? Is this your “baby”?

THEME 3. Tools: the business case

What is a Business Case?

Definition: a business case is a tool to communicate a message or 'pitch' to an investor. It should *convince* a decision-maker to approve some kind of action.

An 'investor' could be a donor, government agency, potential partner or shareholder, or a bank or other financial institution.

A business model "describes the rationale of how an organization creates, delivers, and captures value" (Ostenwalder and Pigneur 2010)

A business plan provides the steps to achieve the goal of the model. i.e. how the business model will operate, what equipment and staff are needed, how the business will attract and retain customers, deal with competition, and become profitable.

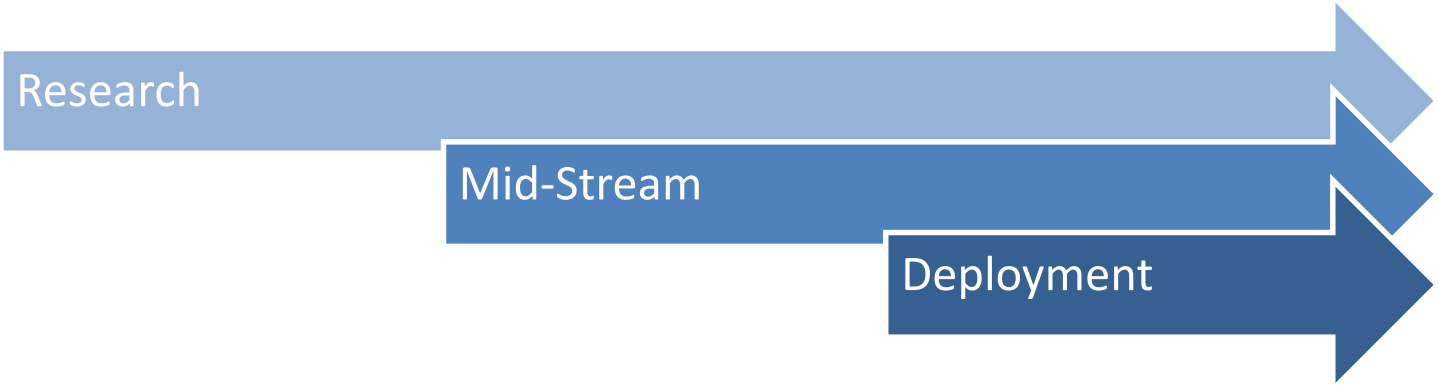
What is a Business Case?

	Business Case	Business Model	Business Plan
Works best:	At different stages of innovation process	When the 'core' product/service is defined	In the context of a firm
For Who:	For-profit of non-profit partnership, project, firm	For-profit of non-profit project, firm	Firm (established or proposed)
Key Content:	The Innovation The Market Value Proposition Delivery Mechanism	Key Partners Key Activities Key Resources Cost Structure Value Proposition Customer Relationships Customer Segments Channels of delivery Revenue Streams	Executive summary Why this is a winning team The business model: • Vision, mission, values • Value proposition • Target market, marketing plan Financial Analysis: • Breakeven analysis • Sales scenarios, projections • Operating costs External Environment Implementation Roadmap Risk Analysis Conclusion and Annexes

What is a Business Case?

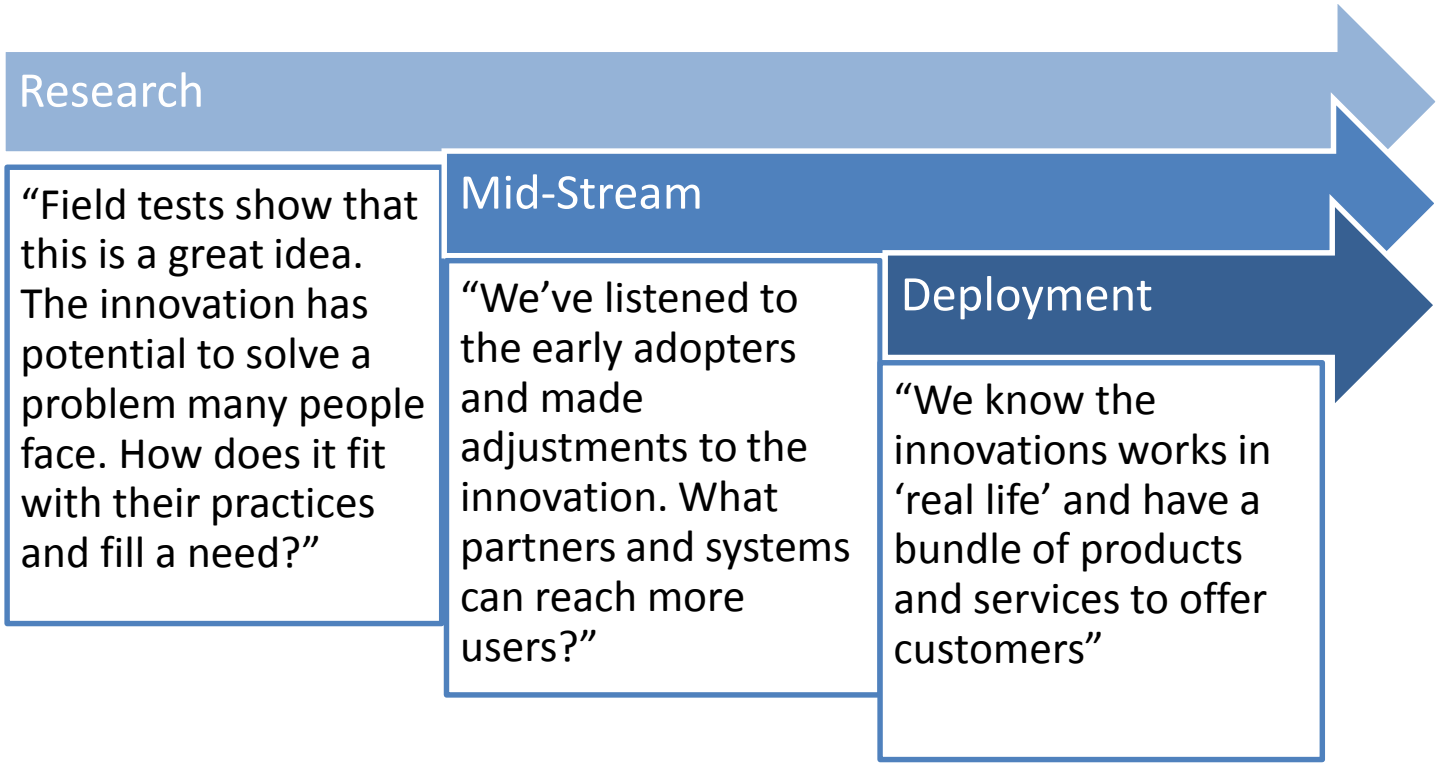
What elements are included in a business case?

i. The Innovation
ii. The Market
iii. Value Proposition
iv. Delivery Mechanism



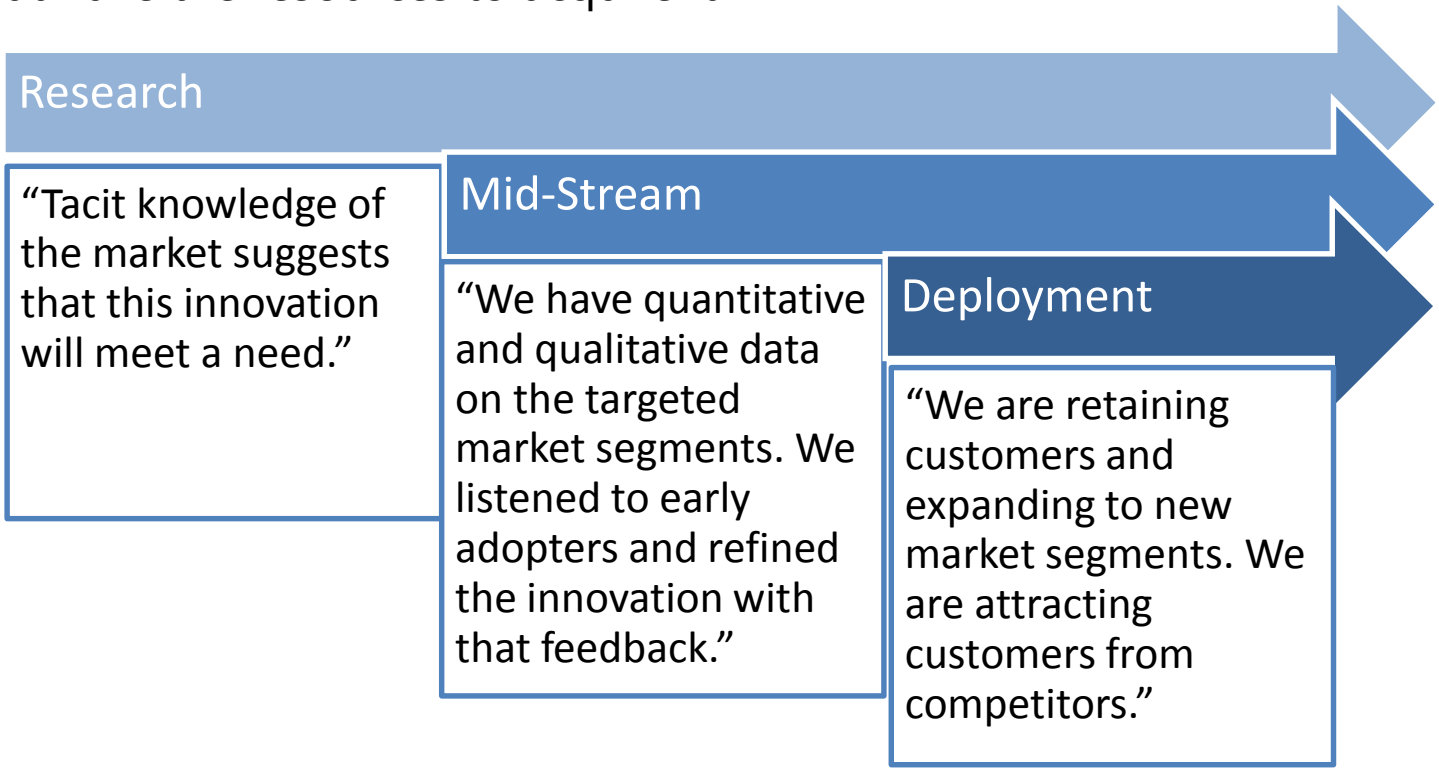
The Innovation

Innovation: a tested method, technology or practice.



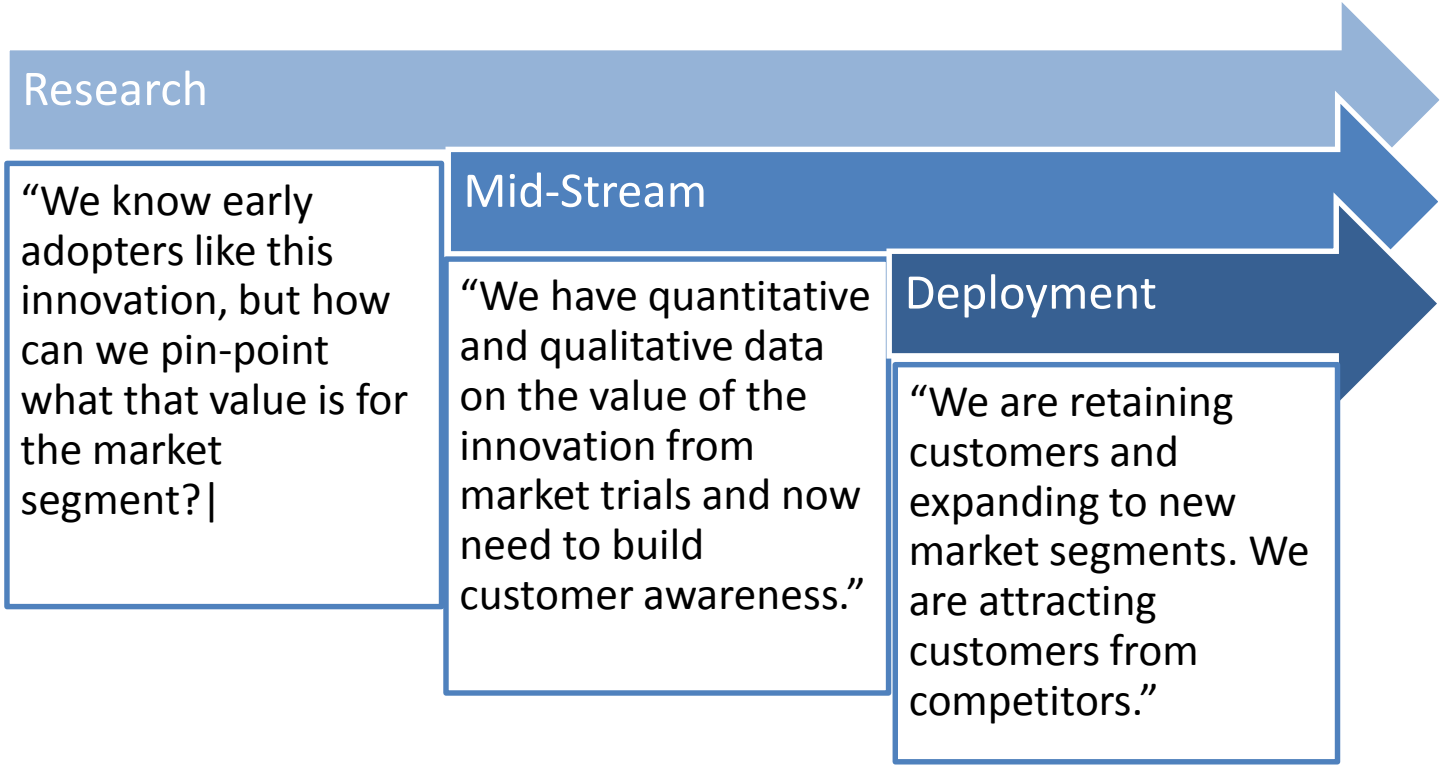
The Market

Market: a group of consumers or users interested in a product or service that have the resources to acquire it



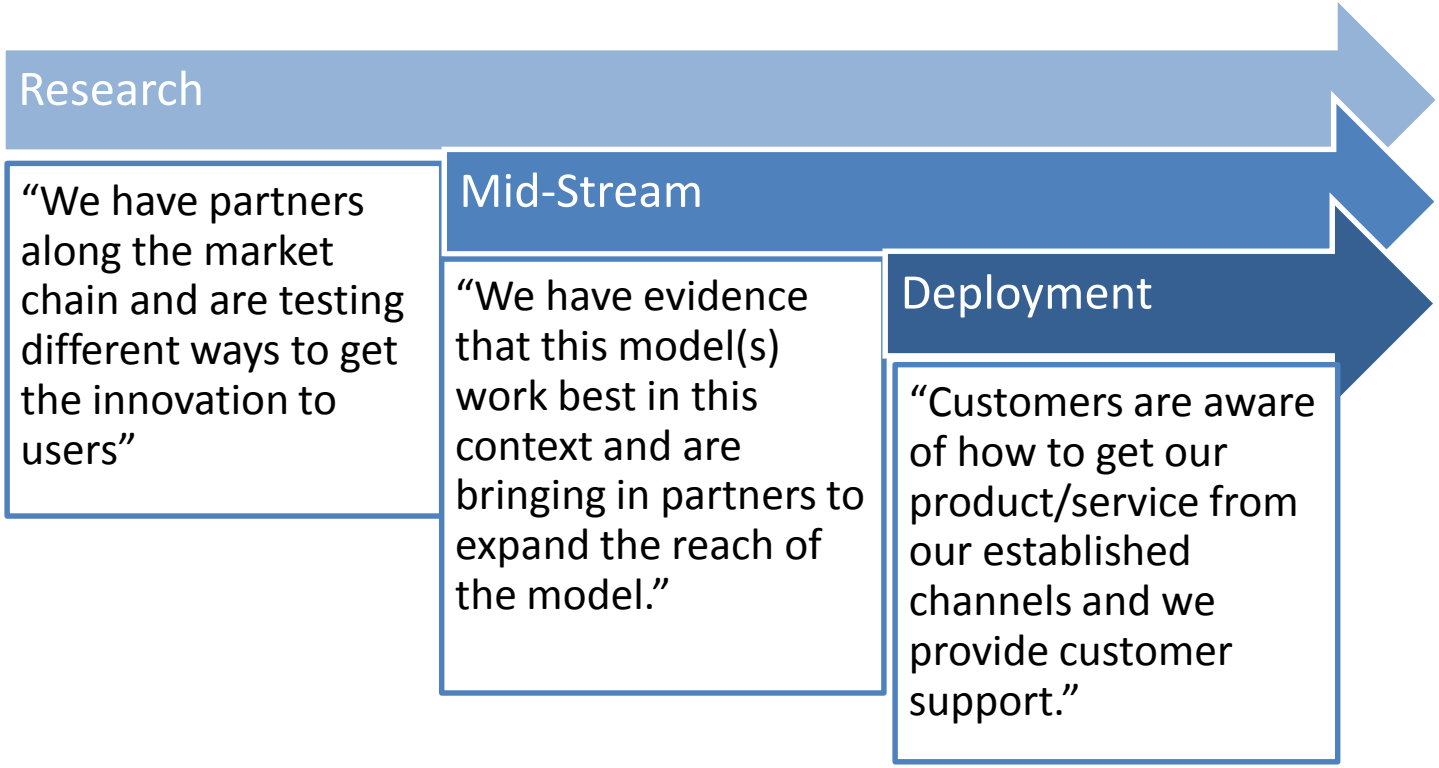
Value Proposition

Value Proposition: a mix of elements that cater to segment needs to create value for them. Value is both quantitative (i.e. speed of delivery) and qualitative (i.e. design and customer experience)



Delivery Mechanism

Delivery Mechanism: how the innovation gets to the customer segments to deliver value.



Overview of Innovation Pipeline

	Stage 1	Stage 2	Stage 3
Content:	The problem being solved Evidence from pilot testing Understanding user practices Preliminary cost-benefit analysis and delivery mechanism(s)	Quantitative analysis of model Cost-benefit analysis Marketing plan for segment Deliver mechanism model	Market Research: characteristics of users, market segments, and number of users Financial sustainability and value to customers
Purpose:	Focus on 'core' of the innovation Strategize how your innovation solves a problem faced by many people	Make decisions Build strategic partnerships and systems	Attract investment ('pitch') Attract partners with resources and networks
Key Actions:	Plan early Listen to your users Plan for 'extreme affordability'	Build supply chains Build customer awareness and integrate feedback Brand awareness	New market or geographic segments (adjacent growth) Bring down fixed and unit costs Enhance systems, build assets

Stage 1

INNOVATION:

- Description of the of the innovation
- Evidence that shows how it worked in pilot testing
- Proof of concept in other contexts: the transferable ‘core’

MARKET:

- Feedback from tests with users and market trials
- Description of customer needs
- Tacit knowledge of characteristics of target market segment
- Identifying potential partners who can reach this market

VALUE PROPOSITION:

- Value innovation offers to potential users is clearly defined
- Preliminary cost-benefit analysis, may have some gaps in the numbers

DELIVERY MECHANISM:

- May plan to test several models to get the innovation to the user

Stage 2

INNOVATION:

- Description of the of the innovation
- Evidence that shows how it worked in 'real life' in multiple contexts
- Thinking about bundles of products and services

MARKET:

- Well-defined target market segment and understanding of demand
- Build customer awareness of the innovation
- Qualitative and quantitative knowledge of target market segment

VALUE PROPOSITION:

- Value offered to early adopters, demonstrate that the concerns of sceptics are addressed. Marketing plan clearly defined
- Cost-benefit analysis is comprehensive and demonstrates the product/service to be financially sustainable within a timeframe

DELIVERY MECHANISM:

- The most cost and time efficient model is selected and described Partners in the supply chain are involved

Stage 3

INNOVATION:

- Description of the of the innovation
- Evidence that shows how it works for your users
- Bundles of products/services

MARKET:

- Build brand awareness
- Expand to new market segments
- Address competition

VALUE PROPOSITION:

- A need is satisfied, performance is improved, customization offered
- Cost-benefit analysis and financial sustainability

DELIVERY MECHANISM:

- Critical routines (activities) of frontline workers are established
- Bottlenecks are addressed

THEME 4. Research on scaling up

Research on scaling up

What kinds of scaling up models, strategies and approaches can be effectively deployed to scale up science-based innovations?

- Scoping studies
- Comparative studies
- Cases

Research on scaling up

How can tools and approaches from the "business world" be adapted and effectively applied to research-for-development objectives?

- Business case
- Dynamic modelling and projections
- Behavioural economics and sociology of practice

Research on scaling up

What kind of research on scaling up are you undertaking?

Opportunities for collaboration?

Thanks!